

June 1, 2004
Agenda Item 4.2

Memorandum

Date: May 25, 2004
To: ACTAC
From: Saravana Suthanthira, Associate Transportation Planner
Subject: 2004 Level of Service Monitoring on the CMP Roadway Network – Preliminary Results/Administrative Draft Report

Action Requested

ACTAC is requested to (1) provide comments on the preliminary results of the 2004 Level of Service Monitoring (LOS) on the CMP Roadway network. Tables 1 and 2 are attached showing LOS F's for the PM and AM peak periods for segments on which data has been collected as of May 14, 2004. Also attached is the list of all the segments with the available LOS results as of May 14, 2004. Data collection has been completed on approximately 50 percent of the network and partially completed on 21 percent of the network. Data collection on all of the PM peak segments is scheduled to be completed by May 28, 2004; and (2) review and approve the methodology described below to apply a range for LOS F in the 2004 LOS Monitoring Study on the freeway and ramp segments.

Comments are due to the CMA by June 11, 2004. The Draft Report with complete information will be presented to the Committees for comment at their July meetings.

Next Steps

Prepare draft and final reports for the July Committee meetings. The findings of the report will be used by the Board in the conformity findings process and to identify segments for which deficiency plans may be needed. Jurisdictions that will be required to prepare a deficiency plan will be notified following completion of the application of the statutory exemptions and select link analysis. ACCMA staff will be available for technical assistance at the request of the local jurisdictions.

Discussion

LOS Monitoring Results

The attached Tables 1 and 2 show the preliminary results of the 2004 LOS Monitoring data collection efforts for the PM and AM peak periods, respectively. Shaded segments indicate LOS F conditions that were first reported during the 1991 surveys

(grandfathered) and **bold** segments indicate new LOS F segments. As of May 14, 2004, data has been completely collected on 50 percent and partially collected on 20 percent of the PM network, including freeways, arterials and ramps and special segments. For the AM network, data has been completely collected on 56 percent and partially collected on 22 percent of the network.

Table 1 shows the preliminary results for the p.m. peak segments. To date 14 freeway PM peak segments and 5 arterial segments are operating at LOS F in 2004 compared to 16 freeway PM peak segments and 4 arterial segments in 2002. Of the above 19 PM peak segments, 8 are operating at LOS F for the first time, 5 are not grandfathered in and the remaining 6 are grandfathered in.

The following are the details of the segments with first time LOS F:

- I-80 WB: Toll Plaza to the SF County Line. This is probably due to Bay Bridge construction. Jurisdiction- Oakland.
- I-580 SB: Harrison to SR 13. Jurisdiction – Oakland.
- I-880 SB: I-980 to 23rd Avenue. Jurisdiction - Oakland
- SR 13 NB: Moraga to Hiller. Jurisdiction - Oakland
- SR 13 SB: Joaquin Miller/Lincoln to I-580 Ramp. Jurisdiction - Oakland
- Adeline NB: Martin Luther King, Jr. South To Martin Luther King, Jr. North. Jurisdiction – Berkeley.
- SR 77 (42nd) EB: I-880 to E. 14th. Jurisdiction – Oakland.
- Decoto EB: Alvarado-Niles to Union Square. Jurisdiction – Union City

The following are the details of the segments that are not grandfathered in and operating at LOS F:

- I-238 WB: I-580 to I-880. Jurisdiction – Alameda County/San Leandro
- I-580 EB: I-680 to Santa Rita Road. Jurisdiction – Pleasanton
- I-580 WB: Center to I-580/I-238. Jurisdiction – Alameda County
- I-880 NB: Alvarado-Niles to Tennyson. Jurisdiction – Union City/ Hayward
- SR 13 Ashby: College to Domingo. Jurisdiction - Berkeley

Of the ramps and special segments for which data has been collected, none are operating at LOS F compared to two in 2002.

After completing the data collection and finalizing the LOS results, select link model runs will be done on these segments to identify which LOS F segments would require deficiency plans.

Table 2 shows the preliminary results for the AM peak segments. To date 5 freeway AM peak segments are operating at LOS F. In 2002, 14 freeway AM peak segments were operating at LOS F. Of the 5 AM peak segments, one is operating at LOS F for the first time. It is:

- I-880 SB: Stevenson to SR 262/Mission. Jurisdiction – Fremont.

A detailed list of all the 2004 LOS Monitoring preliminary results is attached (Appendices -1 through 4). These will be the appendices of the 2004 LOS Monitoring Report and include PM freeway, state highway and arterial data, PM ramps and special segment data, and AM freeway data.

The origin-destination pair data collection has not yet been done. These data and the bicycle survey results will be included in the draft report. Currently the runs are being completed by the consultants including the additional runs to verify new LOS F locations and areas where the data looked questionable.

Methodology for Range for LOS F

The CMA Board requested staff to develop a range for LOS F to show the degree of LOS F. Accordingly, the 2003 CMP report included a condition under Chapter 10 - Conclusions and Implementation Issues that “the staff investigate the possibility of applying a range for LOS F on selected freeway segments on the CMP Road Network in the 2004 LOS Monitoring Study”.

On researching the availability of acceptable standards for a range for LOS F generally within the United States and specifically in California, staff found out that there is no acceptable professional standard being used. However, it has been suggested by the traffic engineering firms in the Bay Area that the CMA could come up with a speed range for LOS F for internal purposes that can be indicative of the degree of poor level of service on the roadway segments. Therefore, the following range for LOS F is suggested for application in the 2004 LOS Monitoring Study for the freeway and ramp segments:

LOS F range	Speed (mph)
F1	<30
F2	<20
F3	<10

On developing a range of LOS F for the Arterials, staff found that the speed data collected in the past did not vary enough to apply a range for LOS F; therefore, it was decided to restrict the LOS F range only to freeways and ramp segments.

ACTAC is requested to provide input on this approach. If the above range for LOS F is approved by ACTAC, it will be applied to the 2004 LOS Monitoring results and will be included in the draft report.